customer success story

because ‘a snapshot is not a backup,’ ucsb evaluates new dbbu system – chooses exagrid over data domain

customer overview
originally a small, independent teachers’ college, santa barbara joined the renowned university of california system in 1944 and has since grown to be an integral and important part of public postsecondary education in the state. the university of california santa barbara’s (ucsb) faculty includes six nobel prize winners. ucsb is highly competitive and enrolls more than 23,000 students, almost 3,000 of them at the graduate level. more than 200 majors, degrees, and credentials are offered through ucsb’s five schools and the graduate division.

matching industry leaders
a growing number of higher education institutions are choosing exagrid as their backup storage solution, and that provided validation and comfort level to hank rayner, ucsb’s storage and backup administrator, as he considered exagrid for his it environment.

“The main selling point for the ExaGrid was the fact that another UC (University of California) campus was using it. I actually called the admin from UCLA, and he gave ExaGrid a good review,” Hank said. institutions such as UCLA, the University of New Hampshire, The University at Buffalo School of Medicine and Biomedical Sciences, Hamilton College, Keene State College, and many others are putting their trust in Exagrid.

ExaGrid Offers Compatibility with Most Backup Applications
UCSB uses TSM for its physical servers and Veeam to back up its virtual environment, and it needed a storage solution that could easily work with both. As part of ucsb’s due diligence, Hank looked at other products such as dell EMC Data Domain and vRanger, but ExaGrid stood out as the product of choice for the university.

According to Hank, “So far, the ExaGrid system has been very solid and predictable. I’ve worked with my ExaGrid customer support engineer for upgrades.”

A Place for Tape
Before installing ExaGrid, UCSB’s most recent backups were spun off to tape, requiring multiple staff to monitor the process. Using ExaGrid eliminated the need for that monitoring as well as the ‘error gap’ experienced with tape. “I’m not a fan of tape, but I see that it still has purpose – for instance, for disaster recovery – and I know that Exagrid’s got that capability,” said Hank. Customers can spin off to tape from their ExaGrid systems, and many do!

easy to install and maintain
when asked what he appreciates about using ExaGrid, Hank responded, “It’s easy to use, definitely reliable, and every time I’ve needed to do a restore, it’s done. I haven’t had any unplanned downtime. After reading the documentation, I was able to set up the shares appropriately. Unlike many other things I run, there aren’t loose ends or unknowns with Exagrid. That’s great!”

the ExaGrid system is easy to install and use, and works seamlessly with all of the most frequently used backup applications, so an organization can seamlessly retain their investment in existing applications and processes. in addition, Exagrid appliances can be used at primary and secondary sites to supplement or eliminate offsite tapes with live data repositories for disaster recovery.

key benefits:
- Exagrid natively supports both of ucsb’s existing backup applications
- Time required to monitor tape process and inherent ‘error gap’ eliminated
- Reliability puts an end to unplanned downtime
- ‘Terrific’ deduplication – 41TB of TSM data dedupes down to just 4.1TB
- UCSB migrated from the ‘rollback’ of scripting and snapshotting to true backup

Hank Rayner
Storage and Backup Admin.
Enterprise Technology
Services Department
Daily Reports Provide Peace of Mind

Hank depends on the GUI and the email alerts to keep him apprised of backup status and results. “All I have to do to check my deduplication ratios is look at the ExaGrid interface. I have the system configured to get an email that everything completed successfully, and it tells me my capacity percentages, used and remaining. I like being able to watch and monitor it every day.”

The deduplication ratios that Hank sees daily are currently 5:1 for Veeam and 10:1 for TSM. “The deduplication is terrific – for example, my TSM data is about 41TB, but it’s only using about 4.1TB of disk!”

In addition to the email alerts, automated health check emails are sent from the customer’s system to ExaGrid to proactively alert ExaGrid about diminishing capacity, hardware diagnostics, and other issues. ExaGrid offers a complete set of technical support services to help customers derive the greatest value from ExaGrid and get fast resolution to any technical issues when assistance is needed. ExaGrid’s global technical support team is dedicated to backup and provides the industry’s best customer support experience.

Stress-Free Backup Storage

Hank is pleased that he’s able to back up everything within a reasonable period of time when users aren’t on the network. “I get everything I need backed up on a daily basis, between 6:00 at night and 6:00 in the morning.” ExaGrid provides the shortest backup window that’s fixed in length as data grows. Along with increased capacity, each appliance includes additional processor, memory and bandwidth. As data volumes increase, the need for more resources is met by simply adding appliances to the GRID, resulting in a backup window that is fixed in length. According to Hank, “Before ExaGrid, when a server went down, it was a multi-day scramble to get it back.” However, now that he’s using ExaGrid, restores and recoveries are much easier and less time consuming.

ExaGrid’s unique landing zone retains a full undeduplicated copy of the most recent backup, which ensures that the most recent versions of backup data can be quickly restored or copied to tape without having to rehydrate the data. “We went through a time when we were really budget constrained, and we were using scripting and snapshotting, holding onto the snapshots on the SAN. But we all know that a snapshot is not a backup – it’s more of a rollback,” he said.

ExaGrid and Veeam

The combination of ExaGrid’s and Veeam’s industry-leading virtual server data protection solutions allows customers to utilize Veeam Backup & Replication in VMware, vSphere, and Microsoft Hyper-V virtual environments on ExaGrid’s disk-based backup system. This combination provides fast backups and efficient data storage as well as replication to an offsite location for disaster recovery. The ExaGrid system fully leverages Veeam Backup & Replication’s built-in backup-to-disk capabilities and ExaGrid’s zone-level data deduplication for additional data reduction (and cost reduction) over standard disk solutions. Customers can use Veeam Backup & Replication’s built-in source-side deduplication in concert with ExaGrid’s disk-based backup system with zone-level deduplication to further shrink backups.

ExaGrid-Veeam Combined Dedupe

Veeam uses the information from VMware and Hyper-V and provides deduplication on a “per-job” basis, finding the matching areas of all the virtual disks within a backup job and using metadata to reduce the overall footprint of the backup data. Veeam also has a “dedupe friendly” compression setting which further reduces the size of the Veeam backups in a way that allows the ExaGrid system to achieve further deduplication. This approach typically achieves a 2:1 deduplication ratio.

ExaGrid is architected from the ground up to protect virtualized environments and provide deduplication as backups are taken. ExaGrid will achieve a 3:1 up to 5:1 additional deduplication rate. The net result is a combined Veeam and ExaGrid deduplication rate of 6:1 upwards to 10:1, which greatly reduces the amount of disk storage required.

ExaGrid and IBM TSM (Spectrum Protect)

When IBM TSM customers install an ExaGrid in an IBM TSM environment, their management challenge becomes dramatically simpler. Not only can these customers significantly reduce their dependence on tape, they also no longer need to manage a separate primary disk pool as a staging area from which to copy daily TSM backups, as the ExaGrid effectively acts as both the primary disk pool and the primary storage pool. This allows TSM customers to free up the expensive disk they were using as their primary disk pool and reclaim that for their primary storage needs. In addition, with ExaGrid’s GRID-based architecture, IBM TSM customers not only get the best possible backup performance, they also get the ability to easily maintain that performance as their data grows over time.

About ExaGrid

ExaGrid provides backup storage with a unique landing zone and scale-out architecture. The landing zone provides for the fastest backups, restores and instant VM recoveries. The scale-out architecture includes full appliances in a scalable GRID and provides for a fixed-length backup window as data grows, eliminating expensive forklift upgrades. Learn more at www.exagrid.com.